

Humor and music to reduce the stress and pain related to invasive diagnostic and therapeutical procedures in patients with hematological malignancies

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Dear Editor,

Invasive diagnostic and therapeutical procedures (bone marrow aspiration and biopsy, lumbar puncture, central venous access catheterization, bronchoscopy) are common practices and inevitable when dealing with patients with hematological malignancies. Patients' stress and pain before or during these medical acts remain a constant challenge to overcome and the best strategy to deal with these situations remains to be determined.

I read with great interest two recent reports on this topic by Brunetti et al. [1] and Degen et al. [2] in which the authors argue that anticipatory anxiety resulted as a strong predictor of procedure-related pain and that good and adequate information appears to be the best way to reduce pain. These statements are certainly true. However, I would like to share some ideas and my personal experience on this theme.

Firstly, it is crucial to establish from the beginning a good doctor–patient relationship to strengthen the ties of confidence. This widely facilitates the achievement of success in performing invasive maneuvers due to better cooperation from the patient since there is a reduction in anxiety levels and hence the perception of pain.

Secondly, not all patients experience stress/anxiety and pain in the same way. It is important to know the patients' past psychological/psychiatric history including medications. Although rare, some patients are inherently appealing and may sometimes pretend anxious and in pain just to get

attention. These special cases do not require drug therapy, but a different approach.

Thirdly, the clinician's ability to recognize that in many instances the pain is no more than a psychosomatic manifestation of extreme anxiety, avoids the unnecessary use of analgesics and even sedatives (and the adverse effects associated with them) and may pave the way for the use of a non-pharmacological approach [3].

In this regard, I usually give primacy to the latter method to circumvent these situations.

Two different types of techniques can be used separately or simultaneously. For the anxious and talkative patient, I prefer the use of humor by telling jokes during the entire procedure (usually with the help of a nurse). The use of cognitive psychological techniques including distraction can increase pain tolerance and is a good aid in promoting relaxation and general wellness. Good humor and laughter increase the anxiety and pain threshold and these can be explained in physiological terms by the release of endorphins which are natural stress and pain fighters [4, 5]. The alternative approach is music therapy [6]. It is often said that music touches our souls and it is great to relax the mood and consequently reduces the perception of pain. Many studies favor the concept that the positive experience related to music listening is associated with lower state of anxiety, stress, fear, and pain scores than those who did not listen to music before and after an invasive procedure [7, 8]. The music style has influence, and the soft songs are associated with better outcomes because it not only relaxes the patient, but the physician too. Between classical music and smooth jazz, I opt for the latter one, but it is just a matter of choice.

In short, humor and music can be cheap and alternative methods to fight the patients' anxiety and pain, reduce the morbidity rates associated with the invasive procedures,

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avoid unnecessary use of analgesic and sedative drugs and their adverse effects, and ultimately facilitates the work of doctors and creates a pleasant environment.

Conflicts of interest Nothing to declare.

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